

What is claimed is:

- 1 1. A method of characterizing relationships among members of a social network, the
- 2 method comprising the steps of:
  - 3 receiving a plurality of messages communicated during a dialogue between
  - 4 members of a social network;
  - 5 determining a purpose for each of the messages;
  - 6 determining at least one pattern in the messages communicated during the
  - 7 dialogue; and
  - 8 characterizing the relationships among the members of the social network based
  - 9 on the pattern and purposes of the messages.
- 1 2. The method of claim 1 further comprising the steps of:
  - 2 selecting one of a plurality of purpose categories; and
  - 3 embedding indicia of the selected purpose category in at least one of the plurality
  - 4 of messages.
- 1 3. The method of claim 2 further comprising the step of determining the purpose of
- 2 at least one of the plurality of messages by extracting the indicia therefrom.
- 1 4. The method of claim 1 further comprising the step of determining the purpose of
- 2 each of the messages by extracting indicia of such purpose from a body section of each
- 3 message.

1    5.     The method of claim 1 further comprising the step of determining the purpose of  
2     each of the messages by extracting indicia of such purpose from a header section of each  
3     message.

1    6.     The method of claim 1 wherein at least one of the messages is an electronic mail  
2     message.

1    7.     The method of claim 1 wherein the purpose determined for each of the messages  
2     is selected from at least one of a note, an acknowledgement, a counter, a reverse counter,  
3     a complete, a commit, an acceptance, a decline, an offer, an invitation, a withdrawal, an  
4     opt-out, a request, and a question.

1    8.     The method of claim 1 wherein the pattern in the messages corresponds to one of  
2     a frequency of interaction, a latency in response, a latency in completion, a successful  
3     completion ratio, a nonresponsive ratio, an unsuccessful ratio, and a number of  
4     participating members until completion.

1    9.     The method of claim 1 further comprising the step of analyzing the purpose for  
2     each of the messages to determine the pattern in the messages.

1    10.    The method of claim 1 further comprising the step of classifying the purpose for  
2     each of the messages as one of a favorable, unfavorable, and neutral type.

1    11.    The method of claim 1 further comprising the step of assigning a score to each of  
2     the members of the social network participating in the dialogue, the score assigned to

3     each participating member being based at least in part on the purpose determined for each  
4     of the messages transmitted by that participating member.

1     12.    The method of claim 11 further comprising the steps of:

2               incrementing the score assigned to a particular one of the participating members  
3     in response to favorable purposes associated with messages transmitted by that particular  
4     participating member; and

5               decrementing the score assigned to the particular participating member in  
6     response to unfavorable purposes associated with messages transmitted by that particular  
7     participating member.

1     13.    The method of claim 1 further comprising the steps of:

2               repeating each of the steps in claim 1 for a plurality of dialogues between the  
3     members of the social network; and  
4               assigning a score to each of the members of the social network based on the  
5     purposes of the messages transmitted by each such member during the plurality of  
6     dialogues.

1     14.    The method of claim 13 further comprising the step of using the scores and  
2     characterized relationships of the members to select members of a new social network.

1     15.    A system for characterizing relationships among members of a social network, the  
2     system comprising:

3           a message transmission-reception process receiving a plurality of messages  
4        communicated during a dialogue between members of a social network;  
5           a primitive-detection process determining a purpose for each of the messages;  
6           a pattern-detection process determining at least one pattern in the messages  
7        communicated during the dialogue; and  
8           a group-performance process characterizing the relationships among the members  
9        of the social network based on the pattern and purposes of the messages.

1       16.     The system of claim 15 further comprising a primitive/dialogue-selection process  
2       selecting one of a plurality of purpose categories and embedding indicia of the selected  
3       purpose category in at least one of the plurality of messages.

1       17.     The system of claim 15 wherein the primitive-detection process determines the  
2       purpose of each of the messages by extracting indicia of such purpose from a body  
3       section of each message.

1       18.     The system of claim 15 wherein the primitive -detection process determines the  
2       purpose of each of the messages by extracting indicia of such purpose from a header  
3       section of each message.

1       19.     The system of claim 15 wherein at least one of the messages is an electronic mail  
2       message.

1    20.    The system of claim 15 wherein the purpose for each of the messages determined  
2    by the primitive-detection process corresponds to at least one of a note, an  
3    acknowledgement, a counter, a reverse counter, a complete, a commit, an acceptance, a  
4    decline, an offer, an invitation, a withdrawal, an opt-out, a request, and a question.

1    21.    The system of claim 15 wherein the pattern in the messages determined by the  
2    pattern-detection process corresponds to one of a frequency of interaction, a latency in  
3    response, a latency in completion, a successful completion ratio, a nonresponsive ratio, an  
4    unsuccessful ratio, and a number of participating members until completion.

1    22.    The system of claim 15 wherein the pattern-detection process analyzes the  
2    purpose of each of the messages to determine the pattern in the messages.

1    23.    The system of claim 15 wherein the pattern-detection process classifies the  
2    purpose of each of the messages as one of a favorable, unfavorable, and neutral type.

1    24.    The system of claim 15 wherein the group-performance process assigns a score to  
2    each of the members of the social network participating in the dialogue, the score based at  
3    least in part on the purpose of each of the messages transmitted by that participating  
4    member.

1    25.    The system of claim 24 wherein the group-performance process

2 increments the score assigned to a particular one of the participating members in  
3 response to favorable-type purposes associated with messages transmitted by that particular  
4 participating member; and

5 decrements the score assigned to the particular participating member in response  
6 to unfavorable purposes associated with messages transmitted by that particular  
7 participating member.

1 26. The system of claim 15 wherein the group-performance process assigns a score to  
2 each of the members of the social network based on the purposes of the messages  
3 transmitted by each such member during a plurality of dialogues.

1 27. The system of claim 26 wherein the scores and characterized relationships of the  
2 members are used to select members of a new social network.